AUSQUEST LIMITED



Final Report

PLENTY RIVER PROJECT

For Period 29th January 2010 to 15th December 2010

EL27431

Title Holder: AusQuest Limited

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Map Sheets 1:250K: Illogwa Creek SF5315

Map Sheets 1:100K: Brahma 6051 Commodities: Nickel, PGE Contact Details: Graeme Drew

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FIGURES

Figure 1 2 Location Plan Regional Geology.

1.0 ABSTRACT

Exploration completed during the reporting period (29th January 2010 to 15th November 2010) on EL 27431 involved the interpretation of airborne geophysical data.

The tenement was acquired due to similar interpreted geology to the AusQuest White Gums prospect on EL23566 to the south east (Sherrington et al 2010). Geophysical interpretation indicated that the area was not similar to the White Gums area and accordingly the tenement was relinquished.

No on-ground activities were carried out.

2.0 INTRODUCTION

This is the first and final report on AusQuest tenement EL27431.

3.0 TITLE, LOCATION AND ACCESS

EL 27431 is situated near the northern margin of the Simpson Desert, accessible by tracks from the north from the Plenty Highway (Figure 1).

Tenement	Applic. Date	Grant Date	Area Grant km²	Status
EL 27431	29/6/2009	29/1/2009	142	Surrendered 15/12/2010

4.0 REGIONAL GEOLOGICAL SETTING

Regionally, AusQuest's block of titles at the Plenty River Project, straddles a prominent WNW-ESE structural corridor as defined in aeromagnetic and gravity data. The exposed part of this corridor mainly comprises supracrustal Neoproterozoic to Cambrian metamorphic rocks of the Irindina package, structurally emplaced between Palaeoproterozoic basement rocks (Mawby, 2000; Buick *et al.*, 2001; Pietsch, 2001). The high temperature - high pressure metamorphic event which affected the Irindina package rocks in this region is of Ordovician age (Mawby *et al.*, 1999), and the rocks include pelitic, psammitic and calc-silicate metasediments and mafic lithologies.

Stratigraphy of the Irindina package is well exposed in the Harts Range, and extends eastward into areas of poor exposure in the west of AusQuest's block of titles. Current published mapping (Illogwa Creek 1:250 000 sheet), however, does not correlate outcrop in and at the margins of AusQuest's western titles with recognised Irindina stratigraphy.

Further to the southeast, flat-lying sedimentary cover sequences blanket the metamorphic and igneous rocks of the Arunta Province to increasing depths. The thickest component of these cover sequences belongs to the Eromanga Basin, spanning an age bracket of Late Jurassic to Cretaceous. Thin remnants of a Tertiary sedimentary stratigraphy are patchily developed (or preserved) and Quaternary

fluvio-aeolian unconsolidated sediment forms a veneer of dune-dominated cover in the Simpson Desert.

5.0 PREVIOUS EXPLORATION

The only previous exploration recorded in the area was some regional geological assessment and ground reconnaissance by Tanami Gold in 2004 on tenement EL 22920.

6.0 LOCAL GEOLOGY

Tenement EL 27431 contains scattered exposures of Irindina Province metamorphic rocks through Quaternary and Tertiary dunes and recent sediments.

7.0 EXPLORATION ACTIVITIES

Geophysical interpretation of the available open file aeromagnetic data was carried out.

8.0 REHABILITATION

No rehabilitation is necessary as no on-ground activities were carried out.

9.0 CONCLUSIONS AND RECOMMENDATIONS

Geophysical interpretation of the available open file aeromagnetic data indicated that the initial geological interpretation was not correct and therefore the tenement was surrendered.

10.0 REFERENCES

Buick, I. S., Miller, J. A., Williams, I. S., Hand, M. and Mawby, J. 2001. Deep holes in the Centralian Superbasin, SHRIMP zircon constraints on the depositional age of granulites in the eastern Arunta Block. Geological Society of Australia, Abstracts, 64, 13-14

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Mawby, J., Hand, M. and Foden, J. 1999. Sm-Nd evidence for high-grade Ordovician metamorphism in the Arunta Block, central Australia. Journal of Metamorphic Geology 17. 653-668.

Pietsch, B. 2001. Towards an Arunta framework. Annual Geoscience Exploration Seminar (AGES), record of abstracts. Alice Springs. Northern Territory Geological Survey Record GS 2001-0006.

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